

B. Claims

A complete listing of all the claims appears below; this listing replaces all earlier amendments and listings of the claims.

1. (Currently Amended) A carbonaceous particle comprising a hexagonal flake formed of an aggregate of a plurality of nanocarbons and having a side length of 0.1 to 100 μm and a thickness of ~~10 μm~~ 10 nm to 1 μm .
2. (Original) The carbonaceous particle according to claim 1, wherein the hexagonal flake has a layered structure.
3. (Original) The carbonaceous particle according to claim 1, wherein the ratio of the thickness to the side length of the hexagonal flake is 1/10 to 1/100.
4. (Original) The carbonaceous particle according to claim 2, wherein the hexagonal flake comprises a stack of a plurality of hexagonal sheets.
5. (Original) The carbonaceous particle according to claim 1, wherein the hexagonal flake comprises a microstructure comprising an aggregate of stacks of graphene sheets.

6. (Original) The carbonaceous particle according to claim 5, wherein the graphene sheets are arranged such that the plane of the graphene sheet is substantially perpendicular to the plane of the hexagonal flake.

7. (Original) The carbonaceous particle according to any one of claims 1 to 6, wherein the hexagonal flake comprises an aggregate of microcrystals simultaneously having crystal lattice planes with a crystal lattice spacing of 0.329 to 0.346 nm, 0.209 to 0.219 nm and 0.199 to 0.209 nm, respectively.

8. (Previously Presented) The carbonaceous particle according to any one of claims 1 to 6, which contains iron element and at least one of sulfur element and oxygen element.

9. (Previously Presented) A method of producing the hexagonal, flaky carbonaceous particle set forth in claim 1, comprising the step of reacting (a) a carbon-containing compound, and at least (b) iron or an iron compound, and (c) at least one of an oxygen-containing compound and a sulfur-containing compound, at a pressure within the range of 2.5 to 60 MPa and at a temperature within the range of 80 to 800°C.

10. (Previously Presented) A method of producing the hexagonal, flaky carbonaceous particle set forth in claim 1, comprising the step of reacting (a) a carbon-

containing compound, and at least (b/c) iron and a sulfur-containing compound, or an iron compound and a sulfur-containing compound, and (d) a medium, at a pressure within the range of 2.5 to 60 MPa and at a temperature within the range of 80 to 800°C.

11. (Previously Presented) A method of producing the hexagonal, flaky carbonaceous particle set forth in claim 1, comprising the step of reacting (a) a carbon-containing compound, and at least (b/c) iron and an oxygen-containing compound, or an iron compound and an oxygen-containing compound, at a pressure within the range of 2.5 to 60 MPa and at a temperature within the range of 80 to 800°C.

12. (Currently Amended) A method of producing the hexagonal, flaky carbonaceous particle set forth in claim 1, comprising the step of reacting (a) an aromatic hydrocarbon, at least (b/c) iron and a thiol compound or an iron compound and a thiol compound, and (d) at least one medium selected from the group consisting of carbon dioxide, an alcohol, an ether, a hydrocarbon, water, and an inert gas, at a pressure within the range of 2.5 to 60 MPa and at a temperature within the range of 80 to 800°C.

13. (Currently Amended) The method of producing the hexagonal, flaky carbonaceous particle according to ~~any one of claims 9 to 12~~ claim 10 or 12, wherein the temperature and pressure during the reaction are such that at least one of the

carbon-containing compound (a) and the medium (d) becomes a supercritical fluid or a subcritical fluid.

14. (Currently Amended) The method of producing the hexagonal, flaky carbonaceous particle according to ~~any one of claims 9 to 12~~ claim 10 or 12, wherein a product obtained in the step of reacting (a), (b), (c), and (d) is calcined.

15. (Original) The method of producing the hexagonal, flaky carbonaceous particle according to claim 14, wherein the calcination is performed at a temperature within the range of 900 to 2,800°C in an inert gas atmosphere.

16. (Previously Presented) The method of producing the hexagonal, flaky carbonaceous particle set forth in any one of claims 9 to 12, wherein the produced carbonaceous particle contains iron element and at least one of sulfur element and oxygen element.

17. (Canceled)

18. (New) The method of producing the hexagonal, flaky carbonaceous particle according to claim 9 or 11, wherein the temperature and pressure during the

reaction are such that the carbon-containing compound (a) becomes a supercritical fluid or a subcritical fluid.

19. (New) The method of producing the hexagonal, flaky carbonaceous particle according to claim 9 or 11, wherein a product obtained in the step of reacting (a), (b) and (c) is calcined.

20. (New) The method of producing the hexagonal, flaky carbonaceous particle according to claim 19, wherein the calcination is performed at a temperature within the range of 900 to 2,800°C in an inert gas atmosphere.